

Animal biodiversity:

An outline of higher-level classification and survey of taxonomic richness

ZHI-QIANG ZHANG (ED.)

Table of contents

- 7 **Animal biodiversity: An introduction to higher-level classification and taxonomic richness**
ZHI-QIANG ZHANG
- 13 **Phylum Porifera Grant, 1826. In: Zhang, Z.-Q. (Ed.) Animal biodiversity: An outline of higher-level classification and survey of taxonomic richness**
JOHN N.A. HOOPER, ROB W.M. VAN SOEST & ANDRZEJ PISERA
- 19 **Class Anthozoa Ehrenberg, 1834. In: Zhang, Z.-Q. (Ed.) Animal biodiversity: An outline of higher-level classification and survey of taxonomic richness**
ANDREA L. CROWTHER
- 24 **Phylum Xenacoelomorpha Philippe, *et al.*, 2011. In: Zhang, Z.-Q. (Ed.) Animal biodiversity: An outline of higher-level classification and survey of taxonomic richness**
SETH TYLER AND STEPHEN SCHILLING
- 26 **Pisces. In: Zhang, Z.-Q. (Ed.) Animal biodiversity: An outline of higher-level classification and survey of taxonomic richness**
WILLIAM N. ESCHMEYER & JON D. FONG
- 39 **Class Amphibia Gray, 182. In: Zhang, Z.-Q. (Ed.) Animal biodiversity: An outline of higher-level classification and survey of taxonomic richness**
DAVID C. BLACKBURN & DAVID B. WAKE
- 56 **Class Mammalia Linnaeus, 1758. In: Zhang, Z.-Q. (Ed.) Animal biodiversity: An outline of higher-level classification and survey of taxonomic richness**
D.E. WILSON & D.M. REEDER
- 61 **Order Testudines Batsch, 1788. In: Zhang, Z.-Q. (Ed.) Animal biodiversity: An outline of higher-level classification and survey of taxonomic richness**
UWE FRITZ
- 63 **“Phylum Nematoda Cobb 1932. In: Zhang, Z.-Q. (Ed.) Animal biodiversity: An outline of higher-level classification and survey of taxonomic richness**
MIKE HODDA
- 96 **Phylum Tardigrada Doyère, 1840. In: Zhang, Z.-Q. (Ed.) Animal biodiversity: An outline of higher-level classification and survey of taxonomic richness**
ROBERTO GUIDETTI & ROBERTO BERTOLANI
- 98 **Phylum Onychophora Grube, 1853. In: Zhang, Z.-Q. (Ed.) Animal biodiversity: An outline of higher-level classification and survey of taxonomic richness**
GEORG MAYER & IVO DE SENA OLIVEIRA
- 99 **Phylum Arthropoda von Siebold, 1848 In: Zhang, Z.-Q. (Ed.) Animal biodiversity: An outline of higher-level classification and survey of taxonomic richness**
ZHI-QIANG ZHANG

- 104 **Class Trilobita Walch, 1771. *In: Zhang, Z.-Q. (Ed.) Animal biodiversity: An outline of higher-level classification and survey of taxonomic richness***
JONATHAN M. ADRAIN
- 110 **Class Pycnogonida Latreille, 1810. *In: Zhang, Z.-Q. (Ed.) Animal biodiversity: An outline of higher-level classification and survey of taxonomic richness***
ROGER BAMBER
- 112 **Order Opiliones Sundevall, 1833. *In: Zhang, Z.-Q. (Ed.) Animal biodiversity: An outline of higher-level classification and survey of taxonomic richness***
ADRIANO B. KURY
- 115 **Order Scorpiones C.L. Koch, 1850. *In: Zhang, Z.-Q. (Ed.) Animal biodiversity: An outline of higher-level classification and survey of taxonomic richness***
LORENZO PRENDINI
- 118 **Order Solifugae Sundevall, 1833. *In: Zhang, Z.-Q. (Ed.) Animal biodiversity: An outline of higher-level classification and survey of taxonomic richness***
LORENZO PRENDINI
- 119 **Order Pseudoscorpiones de Geer, 1778. *In: Zhang, Z.-Q. (Ed.) Animal biodiversity: An outline of higher-level classification and survey of taxonomic richness***
MARK HARVEY
- 121 **Order Palpigradi Thorell, 1888. *In: Zhang, Z.-Q. (Ed.) Animal biodiversity: An outline of higher-level classification and survey of taxonomic richness***
LORENZO PRENDINI
- 122 **Order Ricinulei Thorell, 1876. *In: Zhang, Z.-Q. (Ed.) Animal biodiversity: An outline of higher-level classification and survey of taxonomic richness***
LORENZO PRENDINI
- 123 **Superorder Parasitiformes Reuter, 1909. *In: Zhang, Z.-Q. (Ed.) Animal biodiversity: An outline of higher-level classification and survey of taxonomic richness***
FRÉDÉRIC BEAULIEU
- 129 **Order Trombidiformes Reuter, 1909. *In: Zhang, Z.-Q. (Ed.) Animal biodiversity: An outline of higher-level classification and survey of taxonomic richness***
ZHI-QIANG ZHANG, QING-HAI FAN, VLADIMIR PESIC, HARRY SMIT, ANDRE V. BOCHKOV, A. A. KHAUSTOV, ANNE BAKER, ANDREAS WOHLTMANN, TINGHUAN WEN, JAMES W. AMRINE, P. BERON, JIANZHEN LIN, GRZEGORZ GABRYS & ROBERT HUSBAND
- 139 **Suborder Endeostigmata Reuter, 1909. *In: Zhang, Z.-Q. (Ed.) Animal biodiversity: An outline of higher-level classification and survey of taxonomic richness***
DAVID EVANS WALTER, SAMUEL BOLTON, MATTI UUSITALO & ZHI-QIANG ZHANG
- 141 **Suborder Oribatida van der Hammen, 1968. *In: Zhang, Z.-Q. (Ed.) Animal biodiversity: An outline of higher-level classification and survey of taxonomic richness***
HEINRICH SCHATZ
- 149 **Order Araneae Clerck, 1757. *In: Zhang, Z.-Q. (Ed.) Animal biodiversity: An outline of higher-level classification and survey of taxonomic richness***
JASON A. DUNLOP AND DAVID PENNEY

- 154 **Order Amblypygi Thorell, 1883. *In: Zhang, Z.-Q. (Ed.) Animal biodiversity: An outline of higher-level classification and survey of taxonomic richness***
LORENZO PRENDINI
- 155 **Order Thelyphonida Latreille, 1804. *In: Zhang, Z.-Q. (Ed.) Animal biodiversity: An outline of higher-level classification and survey of taxonomic richness***
LORENZO PRENDINI
- 156 **Order Schizomida Petrunkevitch, 1945. *In: Zhang, Z.-Q. (Ed.) Animal biodiversity: An outline of higher-level classification and survey of taxonomic richness***
LORENZO PRENDINI
- 157 **Class Chilopoda, Class Symphyla and Class Pauropoda. *In: Zhang, Z.-Q. (Ed.) Animal biodiversity: An outline of higher-level classification and survey of taxonomic richness***
ALESSANDRO MINELLI
- 159 **Class Diplopoda de Blainville in Gervais, 1844. *In: Zhang, Z.-Q. (Ed.) Animal biodiversity: An outline of higher-level classification and survey of taxonomic richness***
WILLIAM SHEAR
- 165 **Subphylum Crustacea Brünnich, 1772. *In: Zhang, Z.-Q. (Ed.) Animal biodiversity: An outline of higher-level classification and survey of taxonomic richness***
SHANE T. AHYONG, JAMES K. LOWRY, MIGUEL ALONSO, ROGER N. BAMBER, GEOFFREY A. BOXSHALL, PETER CASTRO, SARAH GERKEN, GORDAN S. KARAMAN, JOSEPH W. GOY, DIANA S. JONES, KENNETH MELAND, D. CHRISTOPHER ROGERS & JÖRUNDUR SVAVARSSON
- 192 **Class Collembola Lubbock, 1870. *In: Zhang, Z.-Q. (Ed.) Animal biodiversity: An outline of higher-level classification and survey of taxonomic richness***
FRANS JANSSENS AND KENNETH A. CHRISTIANSEN
- 195 **Order Orthoptera Oliver, 1789. *In: Zhang, Z.-Q. (Ed.) Animal biodiversity: An outline of higher-level classification and survey of taxonomic richness***
SIGFRID INGRISCH
- 198 **Order Phasmida Leach. 1815. *In: Zhang, Z.-Q. (Ed.) Animal biodiversity: An outline of higher-level classification and survey of taxonomic richness***
PAUL D. BROCK & JUDITH MARSHALL
- 199 **Order Blattodea Brunner von Wattenwyl, 1882. *In: Zhang, Z.-Q. (Ed.) Animal biodiversity: An outline of higher-level classification and survey of taxonomic richness***
GEORGE W. BECCALONI & PAUL EGGLETON
- 201 **Order Thysanoptera Haliday, 1836. *In: Zhang, Z.-Q. (Ed.) Animal biodiversity: An outline of higher-level classification and survey of taxonomic richness***
LAURENCE A. MOUND
- 203 **Order Coleoptera Linnaeus, 1758. *In: Zhang, Z.-Q. (Ed.) Animal biodiversity: An outline of higher-level classification and survey of taxonomic richness***
S. A. SLIPINSKI, R. A. B. LESCHEN, AND J. F. LAWRENCE
- 209 **Order Trichoptera Kirby, 1813. *In: Zhang, Z.-Q. (Ed.) Animal biodiversity: An outline of higher-level classification and survey of taxonomic richness***
RALPH W. HOLZENTHAL, JOHN C. MORSE & KARL M. KJER

- 212 **Order Lepidoptera Linnaeus, 1758. In: Zhang, Z.-Q. (Ed.) Animal biodiversity: An outline of higher-level classification and survey of taxonomic richness**
ERIK J. VAN NIEUKERKEN, LAURI KAILA, IAN J. KITCHING, NIELS P. KRISTENSEN, DAVID C. LEES, JOËL MINET, CHARLES MITTER, MARKO MUTANEN, JEROME C. REGIER, THOMAS J. SIMONSEN, NIKLAS WAHLBERG, SHEN-HORN YEN, REZA ZAHIRI, DAVID ADAMSKI, JOAQUIN BAIXERAS, DANIEL BARTSCH, BENGT Å. BENGTSSON, JOHN W. BROWN, SIBYL RAE BUCHELI, DONALD R. DAVIS, JURATE DE PRINS, WILLY DE PRINS, MARC E. EPSTEIN, PATRICIA GENTILI-POOLE, CEES GIELIS, PETER HÄTTENSCHWILER, AXEL HAUSMANN, JEREMY D. HOLLOWAY, AXEL KALLIES, OLE KARSHOLT, AKITO Y. KAWAHARA, SJAAK (J.C.) KOSTER, MIKHAIL V. KOZLOV, J. DONALD LAFONTAINE, GERARDO LAMAS, JEAN-FRANÇOIS LANDRY, SANGMI LEE, MATTHIAS NUSS, KYU-TEK PARK, CARLA PENZ, JADRANKA ROTA, ALEXANDER SCHINTLMEISTER, B. CHRISTIAN SCHMIDT, JAE-CHEON SOHN, M. ALMA SOLIS, GERHARD M. TARMANN, ANDREW D. WARREN, SUSAN WELLER, ROMAN V. YAKOVLEV, VADIM V. ZOLOTUHIN, ANDREAS ZWICK
- 222 **Order Diptera Linnaeus, 1758. In: Zhang, Z.-Q. (Ed.) Animal biodiversity: An outline of higher-level classification and survey of taxonomic richness**
THOMAS PAPE, VLADIMIR BLAGODEROV & MIKHAIL B. MOSTOVSKI
- 230 **Phylum Phoronida Hatschek, 1888. In: Zhang, Z.-Q. (Ed.) Animal biodiversity: An outline of higher-level classification and survey of taxonomic richness**
CHRISTIAN C. EMIG
- 231 **Phylum Rotifera Cuvier, 1817. In: Zhang, Z.-Q. (Ed.) Animal biodiversity: An outline of higher-level classification and survey of taxonomic richness**
H. SEGERS
- 234 **Phylum Acanthocephala Kohlreuther, 1771 In: Zhang, Z.-Q. (Ed.) Animal biodiversity: An outline of higher-level classification and survey of taxonomic richness**
SCOTT MONKS AND DENNIS J. RICHARDSON